Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1-33. (Canceled)
- 34. (Currently Amended) A method of delivering energy to ablate tissue, comprising the steps of:

providing a device having an ablating element;

positioning the device at an epicardial tissue site, the tissue site having an epicardial near surface and an endocardial far surface;

heating or cooling the tissue site with a first, non-ablating quantity of energy; measuring a temperature change at the tissue site over a period of time; analyzing the temperature change to determine a tissue characterization temperature response of the tissue;

characterizing the tissue based on the temperature response of the tissue, temperature responses of other known tissue types and the input of at least one variable from a list of variables consisting of presence of fat, amount of fat, flow rate of blood, tissue thickness and temperature of blood;

determining an ablation time interval and temperature to be delivered by the ablating element based on the tissue characterization; and

ablating the tissue with a second quantity of energy as directed by the determining step., the ablating step being carried out with input of at least one variable from a list of variables consisting of presence of fat, amount of fat, flow rate of blood, tissue thickness and temperature of blood.

35. (Previously presented) The method of claim 34, wherein:
the analyzing and ablating steps are controlled by a control system; and
the ablating step being carried out by maintaining the epicardial near surface
temperature at a temperature of 0-80°C during the ablating step.

Application No: 09/507,336 Attorney Docket No. 0E-040013US/82410.0027 Response to Office action of September 26, 2006

36. (Original) The method of claim 34, wherein:

the providing step is carried out with the device having an ablating element; and the method also including the step of changing the temperature of the tissue with the ablating element; and

the ablating step is carried out with the ablating element.

- 37. (Canceled)
- 38. (Original) The method of claim 34, wherein:
 the ablating step is carried out using the results of the measuring step to approximate when the far surface achieves a target temperature.
- 39. Canceled
- 40. (Original) The method of claim 34, wherein: the ablating step is carried out with a plurality of ablating elements, wherein no more than 50% of the ablating elements are activated at one time.
- 41. (Original) The method of claim 34, wherein:

the providing step is carried out with the device having a plurality of suction wells, at least one of the ablating elements being positioned in each of the suction wells.

Claims 42-67 Canceled

68. (New) A method of delivering energy to ablate tissue, comprising the steps of: providing a device having an ablating element;

positioning the device at an epicardial tissue site, the tissue site having an epicardial near surface and an endocardial far surface;

applying a first, non-ablating quantity of energy to the tissue site;

Application No: 09/507,336

Attorney Docket No. 0E-040013US/82410.0027 Response to Office action of September 26, 2006

measuring a temperature change at the tissue site over a period of time; analyzing the temperature change to determine a tissue characterization; subsequent to the tissue characterization, ablating the tissue using the ablating element with a second quantity of energy based on the tissue characterization;

the ablating step being carried out with input from at least one variable from a list of variables consisting of presence of fat, amount of fat, flow rate of blood, tissue thickness and temperature of blood.

69. (New) The method of claim 68, wherein:

the analyzing and ablating steps are controlled by a control system; and the ablating step being carried out by maintaining the epicardial near surface temperature at a temperature of 0-80°C during the ablating step.

70. (New) The method of claim 68, wherein:

the method further comprising the step of changing the temperature of the tissue with the ablating element.

71. (New) The method of claim 68, wherein:

the ablating step is carried out using the results of the measuring step to approximate when the far surface achieves a target temperature.

72. (New) The method of claim 68, wherein:

the ablating step is carried out with a plurality of ablating elements, wherein no more than 50% of the ablating elements are activated at one time.

73. (New) The method of claim 68, wherein:

the providing step is carried out with the device having a plurality of suction wells, at least one of the ablating elements being positioned in each of the suction wells.